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	INFORMATI	ON DISCLO	SURE	Application Number	Unassigned 10/623,578			
	STATEMEN	T BY APPLI	CANT	Filing Dat	07/22/2003			
	Data Submit	tted: July 22,	2003	First Named Inv. ntor	Lars Blank			
	Date Submi	ileu. July 22,	, 2009	Group Art Unit	Unknown			
(use as many sheets as necessary)				Examiner Name	Unknown			
Sheet	1	of	3	Attorney Docket Number	030307-0217			

	٠.			U.S. PATENT DOCUMENTS		
		U.S. Patent Document			Date of Publication of	Pages, Columns, Lines, Where Relevant
	Cite No.1	Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear
	`A1	3,655,396		GOTO et al.	04/11/1972	
	A2	4,115,199		PORUBÇAN et al.	09/19/1978	·
1/	A3	5,075,226	1	KANEKO et al.	12/24/1991	
	A4	5,798,237	1	PICATAGGIO et al.	08/25/1998	
٧/ -	A5 "	6,284,518	B1	HENICK-KLING et al.	09/04/2001	· · · · · · · · · · · · · · · · · · ·
 		 				

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Examiner Initials*	Cite No.1	Fo Office	oreign Patent C Number ⁴	Ocument Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	. ⊤ 6
V.C	A6	WO	00/05342	Α	AGRONOMIQUE INST. NAT. RECH.	02/03/2000		: "
	A7	WO	98/10089	A	JENSEN et al.	03/12/1998		

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
(gl	A8	ANDERSEN ET AL., "Are Growth Rates of <i>Escherichia coli</i> in Batch Cultures Limited by Respiration", J. of Bacteriology, 1980, pp. 114-123, vol. 144, no. 1, Univ. of Microbiology, Copenhagen Denmark	
	A9	ANDERSEN et al., "The Importance of Balanced Expression of Glycolytic Genes in Lactococcus Lactis", Meeting Report, 263-270	
	A10	ANDERSEN ET AL., "Twofold Reduction of Phosphofructokinase Activity in Lactococcus lactis Results in Strong Decreases in Growth Rate and in Glycolytic Flux", J. of Bacteriology, 2001, pp. 3458-3467, vol. 183, no. 11, American Society for Microbiology	- 1
	A11	ANRAKU ET AL., "The Aerobic Respiratory Chain of Escherichia coll", TIBS 12, 1987, pp. 262-266, Univ. of Tokyo Hongo, Tokyo Japan	
	A12	ATLAS, R.M., Principles of Microbiology, 1995, p. 147, Mosby-year Book, Inc., Missouri	
	A13	BROCK ET AL., Biology of Microorganisms, Ninth Edition, 2000, Prentice Hall, Upper Saddle River, US	
V	A14	BRYAN-JONES ET AL., "Haematin-Dependent Oxidative Phosphorylation in Streptococcus Faecalis", J. Gen. Microbiol., 1969, pp. 247-260, vol. 58, Printed in Great Britain	

Examiner Signature	LANKSORD	Date Considered	7/30/5
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¹ Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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	INFORMATIO	ON DISCLO	SURE	Application Numb r	Unassigned 10/628,578	
STATEMENT BY APPLICANT				Filing Date	07/22/2003	
	Date Submitted: July 22, 2003			First Named Inventor	Lars Blank	
	Date Submit	ied. July 22	, 2003	Group Art Unit	Unknown	
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Sheet	2	of	3	Attorney Docket Number	030307-0217	

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
xaminer nitials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	7
- 11	A15	BTK 2000 Programme: Conference Programme of the 9 th International BIOThermoKinetics Meeting, Friday,	
S		7 April 2000, 15:00; Heidi Winterberg Andersen: The importance of balanced expression of glycolytic Genes in Lactococcus lactis.	
1	A16	CLARKE ET AL., "The Effect of Haematin and Catalase on Streoticoccus Faecalis var. Zymogenes Growing on Glycerol", J. of General Microbiology, 1980, pp. 339-347, vol. 121, Printed in Great Britain	
	A17	DE RUYTER ET AL., "Controlled Gene Expression Systems for Lactococcus Lactis with the Food-Grade Inducer Nisin", Applied & Environmental Microbiology, 1996, pp. 3662-3667, vol. 62, no. 10, American Society for Microbiology	
	A18	DE VOS ET AL., "Gene Cloning and Expression Systems in Lactococci", Genetics and Biotechnology of Lactic Acid Bacteria, 1994, pp. 52-105, Blackie Academic & Professional, Glasgow, United Kingdom	
	A19	FAUST ET AL., "Phosphorylation Coupled to NADH Oxidation with Fumarate in Streptococcus Faeçalis 10Cl", Archives of Biochemistry & Biophysics, 1970, pp. 392-398, vol. 137, Cornell Univ., Ithaca, New York	
	A20	FOSTER ET AL., "Stoichiometry of Subunits in the H*-ATPase Complex of Escherichia coli", J. of Biological Chemistry, 1982, pp. 2009-2015, vol. 257, no. 4, Univ. of Wisconsin Medical School, Madison Wisconsin	
	A21	GALLIN ET AL., "Evidence for Oxidative Phosphorylation in Streptococcus Faecallis", Biochemical & Biophysical Research Communication, 1964, pp. 630-635, vol. 17, no. 6, Cornell Univ., Ithaca, New York	
	A22	GAY, "Construction and Characterization of an Escherichia Coli Strain wotj a uncl Mutation", J. of Bacteriology, 1984, pp. 820-825, vol. 158, no. 3, American Society for Microbiology	
	A23	INGLEDEW ET AL., "The Respiratory Chains of Escherichia Coll", Microbiological Reviews, 1984, pp. 222-271, vol. 48, American Society for Microbiology	1
	A24	INGRAHAM ET AL., Growth of the Bacterial Cell, 1983, pp. 148-151, Saunderland, Massachusetts: Sinauer Associates, Inc.	
	A25	ISRAELSEN ET AL., "Cloning and Partial Characterization of Regulated Promoters from Lactococcus Lactis Tn917-lacZ Integrants with the New Promoter Probe Vector, pAK80", Applied Environmental Microbiology, 1995, pp. 2540-2547, vol. 61, no. 7, American Society for Microbiology	
	A26	JENSEN ET AL., "Excess Capacity of H*-ATPase and Inverse Respiratory Control in Escherichia coll", EMBO Journal, 1993, pp. 1277-1282, vol. 12, no. 4, Oxford University Press	
	A27	JENSEN ET AL., "Minimal Requirements for Exponential Growth of Lactococcus Lactis", Applied Environmental Microbiology, 1993, pp. 4363-4366, vol. 59, no. 12, American Society for Microbiology	1
1	A28	JENSEN ET AL., "The Sequence of Spacers Between the Consensus Sequences Modulates the Strength of Prokaryotic Promoters", Applied Environmental Microbiology, 1998, pp. 82-87, vol. 64, no. 1, American Society for Microbiology	
A	A2 9	KASHKET, "The Proton Motive Force in Bacteria: A Critical Assessment of Methods", Ann. Rev. Micro., 1985, pp. 219-242, vol. 39, Annual Reviews Inc,	

Examiner Signature	LANGGORD	Date Considered	9/30/2

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	INFORMATION DIS	CLOSURE	Application Number	Unassigned 19 623,578		
	STATEMENT BY A	PPLICANT	Filing Date	07/22/2003		
	Date Submitted: Jul	u 22 2002 .	First Named Invent r	Lars Blank		
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(g)	A30	KOEBMANN ET AL., "The Membrane-Bound H*-ATPase Complex is Essential for Growth of Lactococcus Lactis", J. of Bacteriology, 2000, pp. 4738-4743, vol. 182, no. 17, American Society for Microbiology	
	A31'	MALONEY, "Coupling to an Energized Membrane: Role of Ion-Motive Gradients in the Transduction of Metabolic Energy", Escherichia Coli and Salmonella Typhlmurium, F.C. Neidhardt, ed. 1987, pp. 232-243, American Society of Microbiology	-51
	A32	POOLE ET AL., "Pathways of Electrons to Oxygen", Escherichia Coli and Salmonella Typhimurium, F.C. Neidhardt, ed. 1987, pp. 170-200, American Society of Microbiology,	
	A33	PRITCHARD ET AL., "Cytochrome Formation, Oxygen-Induced Proton Extrusion and Respiratory Activity in Streptococcus Faecalis var. Zymogenes Grown in the Presence of Haematin", J. General Microbiology, 1978, pp. 15-22, vol. 104, Printed in Great Britain	
	A34	PUGH ET AL., "Growth of Streptococcus Faecalis var. Zymogenes on Glycerol: The Effect of Aerobic and Anaerobic Growth in the Presence and Absence of Haematin on Enzyme Synthesis", J. General Microbiology, 1982, pp. 1009-1017, Printed in Great Britain	
	A35	RITCHEY ET AL., "Cytochromes in Streptococcus Faecalis var. Zymogenes Grown in a Haematin- Containing Medium", J. General Microbiology, 1974, pp. 220-228, vol. 85, Printed in Great Britain	
	A36	RITCHEY ET AL., "Distribution of Cytochrome-like Respiration in Streptococci", J. General Microbiology, 1976, pp. 195-203, vol. 93, no. 1, Printed in Great Britain	
	A37	SMALLEY ET AL., "Molar Growth Yields as Evidence for Oxidative Phosphorylation in Streptococcus Faecalis Strain 10C1 ¹ ", J. Bacteriology, 1968, pp. 1595-1600, vol. 96, no. 5, American Society for Microbiology	
	A38	SNEATH ET AL., "Streptococcus", Bergey's Manual of Systematic Bacteriology, 1986, pp. 1043-1071, vol. 2, Williams & Wilkins	
	A39	UNDEN ET AL., "Alternative Respitatory Pathways of Escherichia Coli: Energetics and Transcription Regulation in Response to Electron Acceptors", Biochemica Et Biophysica Acta 1320, 1997, pp. 217-234, Elsevier Science B.V.	
	A40	WACHENFELDT ET AL., "Molecular Biology of Bacillus Subtilis Cytochromes", FEMS Microbiology Letters 100, 1992, pp. 91-100, Federation of European Microbiological Societies	
1	A41	WEB-site Aplin & Barrett (www.aplin-barrett.co.uk/nisaplin_technical.htm); cited as technical. Information.	Ī
W	A42	WHITTENBURY, "Hyrogen Peroxide Formation and Catalase Activity in the Lactic Acid Bacteria", J. Gen. Microbiol., 1964, pp. 18-26, vol. 35, Printed in Great Britain	
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Examiner Signature	CANKSOND	Date Considered	9/30/5

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